



PTO/SB/08A (08-03)

Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of 4

Complete if Known

Application Number	09/843,676
Filing Date	April 26, 2001
First Named Inventor	Cech, Thomas R.
Art Unit	1646
Examiner Name	
Attorney Docket Number	015389-002943US

U.S. PATENT DOCUMENTS+

Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
W	A1	US-5,597,697		01-28-1997	Diamond	
W	A2	US-5,917,025		06-29-1999	Collins	
W	A3	US-5,919,656		07-06-1999	Harrington, et al.	
W	A4	US-6,166,178		12-26-2000	Cech et al.	
W	A5	US-6,309,867 B1		10-30-2001	Cech et al.	
W	A6	US-6,337,200 B1		01-08-2002	Morin	
W	A7	US-6,475,789 B1		11-05-2002	Cech et al.	
W	A8	US-6,610,839 B1		08-26-2003	Cech et al.	
W	A9	US-6,617,110 B1		09-09-2003	Cech et al.	
W	A10	US-6,258,535 B1		07-10-2001	Villeponteau et al.	
W	A11	US-6,261,556 B1		07-17-2001	Weinrich et al.	
W	A12	US-6,261,836 B1		07-17-2001	Cech et al.	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
W	B1	GB	2 317 891	A ✓	04-08-1998			<input type="checkbox"/>
W	B2	PCT	WO 84/03584	A1 ✓	09-13-1984			<input type="checkbox"/>
W	B3	PCT	WO 94/17210	A1 ✓	08-04-1994			<input type="checkbox"/>
W	B4	PCT	WO 98/14592	A2 ✓	04-09-1998			<input type="checkbox"/>
W	B5	PCT	WO 98/14593	A2 ✓	04-09-1998			<input type="checkbox"/>
W	B6	PCT	WO 99/33998	A2 ✓	07-08-1999			<input type="checkbox"/>
W	B7	PCT	WO 99/38964	A2 ✓	08-05-1999			<input type="checkbox"/>
W	B8	PCT	WO 00/46355	A2 ✓	08-10-2000			<input type="checkbox"/>

Examiner
Signature

M. A. L. L. L. L. L.

Date
Considered

July 7, '04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
60037352 v1



Substitute for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 4

Complete if Known

Application Number	09/843,676
Filing Date	April 26, 2001
First Named Inventor	Cech, Thomas R.
Art Unit	1646
Examiner Name	
Attorney Docket Number	015389-002943US

NON PATENT LITERATURE DOCUMENTS

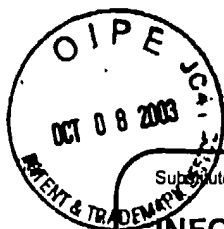
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
dw	C1 ✓	ADAMSON, D. et al. "Significant Telomere Shortening in Childhood Leukemia", <i>Cancer Genet. Cytogenet.</i> , 1992; pp. 204-206, Vol. 61	
dw	C2 ✓	CHIU, et al. "Replicative senescence and cell immortality: the role of telomeres and telomerase (44075)", <i>Proc. Soc. Exp. Bio. Med.</i> , 1997, pp. 99-106, Vol. 214.	
dw	C3 ✓	CHONG, L. et al. "A Human Telomeric Protein", <i>Science</i> , Dec. 1995, pp. 1663-1667, Vol. 270.	
dw	C4 ✓	COUNTER, C. et al. "Telomerase activity in human ovarian carcinoma"; <i>Proc. Natl. Acad. Sci USA</i> ; April 1994; Vol. 91; pp. 2900-2904	
dw	C5 ✓	COUNTER, C. et al. "Telomerase Activity in Normal Leukocytes and in Hematologic Malignancies" <i>Blood</i> ; May 1, 1995; pp. 2315-2320, Vol. 85, No. 9.	
dw	C6 ✓	COUNTER, C. et al. "Telomere shortening associated with chromosome instability is arrested in immortal cells which express telomerase activity", <i>The EMBO Journal</i> ; 1992, pp. 1921-1929, Vol. 11; No. 5, Oxford University Press.	
dw	C7 ✓	DE LANGE, T. et al. "Structure and Variability of Human Chromosome Ends"; <i>Molecular and Cellular Biology</i> ; February 1990; pp. 518-527, Vol. 10, No. 2.	
dw	C8 ✓	FLAVELL, R. & MATHIAS, R. "Prospects for transforming monocot crop plants", <i>Nature</i> , 12 Jan. 1984, pp. 108-109, Vol. 307.	
dw	C9 ✓	FRESHNEY, <i>Culture of Animal Cells. A Manual Basic Technique</i> , p. 4, Alan R. Liss, Inc. New York, 1983.	
dw	C10 ✓	Genbank Accession No. A46242; September 21, 1993	
dw	C11 ✓	Genbank Accession No. L38903; January 30, 1995	
dw	C12 ✓	Genbank Accession No. Q06163; November 01, 1995	
dw	C13 ✓	Genbank Accession No. S39696; October 07, 1994	
dw	C14 ✓	Genbank Accession No. S53396; May 5, 1995	
dw	C15 ✓	GenBank Accession No. U95964; May 5, 1997	
dw	C16 ✓	GLASER, P. et al. "Bacillus subtilis genome project: cloning and sequencing of the 97 kb region from 325° to 333°" <i>Molecular Microbiology</i> , 1993, pp. 371-384, Vol. 10, No. 2.	
dw	C17 ✓	GOODMAN, R. et al. "Gene Transfer in Crop Improvement", <i>Science</i> , 3 April 1997, pp. 48-54, Vol. 236.	

Examiner
SignatureDate
Considered

July 7, '04

¹ EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

² Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



Supplement for form 1449B/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 3 of 4

Complete if Known

Application Number	09/843,676
Filing Date	April 26, 2001
First Named Inventor	Cech, Thomas R.
Art Unit	1646
Examiner Name	
Attorney Docket Number	015389-002943US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
dlw	C18	GREIDER, C. "Telomeres, Telomerase and Senescence"; <i>BioEssays</i> ; 1990; pp. 363-369, Vol. 12, No. 8.	
dlw	C19	HARLEY, C. "Telomere loss: Mitotic clock or genetic time bomb?" <i>Mutation Research</i> ; 1991; pp. 271-282, Vol. 256, Elsevier Science Publishers.	
dlw	C20	HARLEY, C. & VILLEPONTEAU, B. "Telomeres and telomerase in aging and cancer" <i>Current Opinion in Genetics and Development</i> ; 1995, pp. 249-255, Vol. 5.	
dlw	C21	HARLEY, C. et al. "Telomeres shorten during ageing of human fibroblasts", <i>Nature</i> , 31 May 1990; pp. 458-460, Vol. 345.	
dlw	C22	HASTIE, N. et al. "Telomere reduction in human colorectal carcinoma and with ageing", <i>Nature</i> , 30 August 1990, pp. 866-868, Vol. 346.	
dlw	C23	HEALY, K. C. "Telomere dynamics and telomerase activation in tumor progression: prospects for prognosis and therapy" <i>Oncol. Res.</i> , 1995, pp. 121-130, Vol. 7.	
dlw	C24	HENDERSON, C. Cancer genetics gene regulates telomerase resulting in death of cancer cells; <i>Gene Therapy Weekly</i> ; 11 September 1995	
dlw	C25	HIYAMA, E. et al. "Correlating telomerase activity levels with human neuroblastoma outcomes"; <i>Nature Medicine</i> ; 3 March 1995; pp. 249-255, Vol. 1, No. 3.	
dlw	C26	HOLTZMANN, K. et al. "Telomeric Associations and Loss of Telomeric DNA Repeats in Renal Tumors", <i>Genes, Chromosomes & Cancer</i> , 1993, pp. 178-181, Vol. 6.	
dlw	C27	JÄHNE, A. et al. "Genetic Engineering of Cereal Crop Plants: A Review", <i>Euphytica</i> , 1995, pp. 35-44, Vol. 85, Kluwer Academic Publishers, Netherlands.	
dlw	C28	JOHNSON, P. et al., "Expression of Wild-Type p53 Is Not Compatible with Continued Growth of p53-Negative Tumor Cells", <i>Molecular and Cellular Biology</i> , Jan. 1991, p. 1-11, Vol. 11, No. 1.	
dlw	C29	COLLIFFE, L.K. "Humanized antibodies: enhancing therapeutic utility through antibody engineering", <i>Int. Rev. Immunol.</i> , 1993, pp. 241-250, Vol. 10	
dlw	C30	KIM, N. et al. "Specific Association of Human Telomerase Activity with Immortal Cells and Cancer", <i>Science</i> , 23 December 1994, pp. 2011-2014, Vol. 266.	
dlw	C31	KLINGELHUTZ, A. et al. "Restoration of Telomeres in Human Papillomavirus- Immortalized Human Anogenital Epithelial Cells"; <i>Molecular and Cellular Biology</i> ; Feb. 1994, pp. 961-969, Vol. 14, No. 2.	
dlw	C32	LEWIS, A. & CROWE, J.S. "Generation of humanized monoclonal antibodies by 'best fit' framework selection and recombinant polymerase chain reaction", <i>Year Immunol.</i> , 1993, pp. 110-118, Vol. 7	
dlw	C33	Linking telomerase and tumors; <i>Genesis Report- Dx</i> ; 1995; Vol. 4, No. 6; Publisher Genesis Group Associates	
dlw	C34	MALICKI, J. et al. "A human <i>HOX4B</i> regulatory element provides head-specific expression in <i>Drosophila</i> embryos", <i>Nature</i> , 23 July 1992, pp. 345-357, Vol. 358.	

Examiner Signature	<i>Mallick</i>	Date Considered	July 7, '04
--------------------	----------------	-----------------	-------------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08B (08-03)

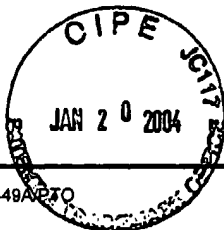
Substitute for form 1449B/PTO		Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/843,676
		Filing Date	April 26, 2001
		First Named Inventor	Cech, Thomas R.
		Art Unit	1646
		Examiner Name	
Sheet 4 of 4	Attorney Docket Number	015389-002943US	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
dw	C35	NATARAJAN et al. "Major histocompatibility complex determinants select T-cell receptor alpha chain variable region dominance in a peptide-specific response." <i>Proc. Natl. Acad. Sci.</i> , Oct 1992, pp. 8874-8878, Vol. 19.	
dw	C36	PASZKOWSKI, JERZY et al. "Direct gene transfer to plants," <i>The EMBO Journal</i> , 1984, pp. 2717-2722, Vol. 3, No. 12.	
dw	C37	POTRYKUS, I. et al. "Direct gene transfer to cells of a graminaceous monocot", <i>Mol. Gen. Genet.</i> , 1985, pp. 183-188, Vol. 199.	
dw	C38	RAYMOND, E., et al.; Agents that target telomerase and telomeres; <i>Curr. Opin. Biotechnol.</i> ; 1996; 7:583-91	
dw	C39	RHYU, M.S. "Telomeres, telomerase, and immortality"; <i>J. Natl. Cancer Inst.</i> ; 21 June 1995; pp. 884-894, Vol. 87, No. 12.	
dw	C40	SCHENA et al. "Parallel human genome analysis: Microarray-based expression monitoring of 1000 genes", <i>Proc. Natl. Acad. Sci.</i> , Oct. 1996, pp. 10614-10619, Vol. 93, USA.	
dw	C41	SCHWARTZ, H. et al. "Telomere Reduction in Giant Cell Tumor of Bone and with Aging"; <i>Cancer Genet Cytogenet</i> ; 1993; pp. 132-138, Vol. 71, Elsevier Science Publishing Co., Inc., New York, U.S.A.	
dw	C42	SMITH, J. & YEH, G. "Telomere Reduction in Endometrial Adenocarcinoma"; <i>Am. J. Obstet. Gynecol.</i> ; Dec. 1992; pp. 1883-1887, Vol. 167, No. 6	
dw	C43	TAIT, J. et al. "Structure and Polymorphisms of the Human Annexin III (ANX3) Gene", <i>Genomics</i> , 1993, pp. 79-86, Vol. 18, No. 1	
dw	C44	WINTER, G. & HARRIS, W. "Humanized Antibodies", <i>Trends Pharmacol. Sci.</i> , May 1993, pp. 139-143, Vol. 14.	
dw	C45	WIRTH, URS et al; "Immediate-Early RNA 2.9 and Early RNA 2.6 of Bovine Herpesvirus 1 Are 3' Coterminal and Encode of Putative Zinc Finger Transactivator Protein"; <i>Journal of Virology</i> ; May 1992; pp. 2763-2772, Vol. 66, No. 5.	

Examiner Signature	<i>Infelicka</i>	Date Considered	<i>July 7, '04</i>
--------------------	------------------	-----------------	--------------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.



PTO/SB/08A (08-03)

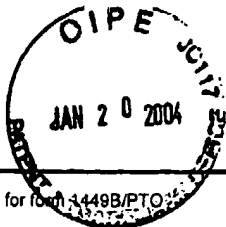
Substitute for form 1449A PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete if Known			
		Application Number	09/843,676		
		Filing Date	April 26, 2001		
		First Named Inventor	Cech, Thomas R.		
		Art Unit	1652		
Examiner Name	Malgorzata A. Walicka				
Sheet	1	of	2	Attorney Docket Number	015389-002943US

U.S. PATENT DOCUMENTS+						
Examiner Initials*	Cite No. ¹	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
mw	A1	US-6,444,650	B1	09-03-2003	Cech et al.	
mw	A2	US-6,517,834	B1	02-11-2003	Weinrich et al.	
mw	A3	US-6,608,188	B1	08-19-2003	Tsuchiya et al.	
mw	A4	US-6,627,619	B2	09-30-2003	Cech et al.	
mw	A5	US 2002-0187471	A1	12-12-2002	Cech et al.	
mw	A6	US 2003-0009019	A1	01-09-2003	Cech et al.	
mw	A7	US 2003-0032075	A1	02-13-2003	Cech et al.	
mw	A8	US 2003-0044953	A1	03-06-2003	Cech et al.	
mw	A9	US 2003-0059787	A1	03-27-2003	Cech et al.	
mw	A10	US 2003-0096344	A1	05-22-2003	Cech et al.	
mw	A11	US 2003-0100093	A1	05-29-2003	Cech et al.	
mw	A12	U.S. Application No. 09/432,503			Cech et al.	
mw	A13	U.S. Application No. 09/721,477			Cech et al.	
mw	A14	U.S. Application No. 09/721,506			Cech et al.	
mw	A15	U.S. Application No. 90/974,584			Cech et al.	

FOREIGN PATENT DOCUMENTS								
Examiner Initials*	Cite No. ¹	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³	Number ⁴	Kind Code ⁵ (if known)				
<i>mw</i>	B1	CA	2271718	A1	05-22-1998			<input type="checkbox"/>
	B2							<input type="checkbox"/>

Examiner Signature	<i>M. Walicka</i>	Date Considered	July 7, '04
-----------------------	-------------------	--------------------	-------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹ Applicant's unique citation designation number (optional). ² Kind Codes of U.S. Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 18 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.
60115098 v1



INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Complete If Known			
		Application Number	09/843,676		
		Filing Date	April 26, 2001		
		First Named Inventor	Cech, Thomas R.		
		Art Unit	1652		
		Examiner Name	Malgorzata A. Walicka		
Sheet	2	of	2	Attorney Docket Number	015389-002943US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	C1	ADAMS, MARK et al. "Initial Assessment of Human Gene Diversity and Expression Patterns Based Upon 83 Million Nucleotides of cDNA Sequence" <i>The Genome Directory: Supplement to Nature</i> 28 September 1995, 1995, pp. 3-174, Vol. 377, Issue 6547S.	
	C2		

Examiner Signature	<i>M. Walicka</i>	Date Considered	<i>July 7, '04</i>
-----------------------	-------------------	--------------------	--------------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Applicant's unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.